IN THE CLAIMS

No amendments are made to the claims, which are reproduced for the Examiner's convenience below:

1. (PREVIOUSLY PRESENTED) A system for providing at least near continuous broadcast service to a terrestrial receiver, comprising:

a plurality of satellites, each satellite in an inclined, elliptical, geosynchronous orbit, each satellite providing a portion of time of the at least near continuous broadcast service to the terrestrial receiver,

wherein the plurality of satellites augments at least one legacy satellite in a geostationary orbit.

2. (ORIGINAL) The system of Claim 1, wherein the plurality of satellites comprises a first satellite actively servicing the terrestrial receiver, and a second satellite, wherein an apparent position of the second satellite relative to the terrestrial receiver is substantially proximate the apparent position of the first satellite relative to the terrestrial receiver when the first satellite completes providing its portion of the broadcast service.

3. (ORIGINAL) The system of Claim 1, wherein a track of the apparent position of each of the satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is substantially closed loop.

4. (ORIGINAL) The system of Claim 3, wherein the terrestrial receiver comprises an antenna having a sensitivity characteristic substantially corresponding to the track of the apparent position of each of the satellites.

5. (ORIGINAL) The system of Claim 3, wherein the track of the apparent position of each of the satellites substantially corresponds to a sensitivity pattern of an antenna at the terrestrial receiver.

6. (ORIGINAL) The system of Claim 1, wherein a track of the apparent position of each of the satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is substantially teardrop-shaped.

7. (PREVIOUSLY PRESENTED) A system for providing at least near continuous broadcast service to a terrestrial receiver, comprising:

a plurality of satellites, each satellite in an inclined, elliptical, geosynchronous orbit, each satellite providing a portion of time of the at least near continuous broadcast service to the terrestrial receiver, wherein the orbit is characterized by an orbital inclination approximately equal to 50 degrees and an eccentricity approximately equal to 0.13.

8. (PREVIOUSLY PRESENTED) The system of Claim 7, wherein the orbit is further characterized by a period approximately equal to 86164 seconds, an altitude at perigee approximately equal to 30305 kilometers, and an altitude at apogee approximately equal to 41268 kilometers.

9. (ORIGINAL) A receiver station for receiving at least near continuous broadcast service from a plurality of satellites in an inclined, elliptical, geosynchronous orbit, comprising:

an antenna having a sensitivity characteristic substantially corresponding to the track of the apparent position of each of the satellites.

10. (ORIGINAL) The receiver station of Claim 9, wherein the receiver antenna comprises a reflector having a focal line and a focal point on the focal line and a head, wherein the head is disposed offset from the focal point.

11. (ORIGINAL) The receiver station of Claim 10, wherein the head is disposed offset from the focal line.

12. (PREVIOUSLY PRESENTED) A receiver station for receiving at least near continuous broadcast service from a plurality of satellites in an inclined, elliptical, geosynchronous orbit, comprising:

an antenna having a sensitivity characteristic substantially corresponding to the track of the apparent position of each of the satellites.

wherein the receiver antenna comprises a reflector having a focal line and a focal point on the focal line and a head, wherein the head is disposed offset from the focal point, and wherein the head is disposed offset from the focal line, and

wherein the reflector is approximately 18 centimeters in diameter, and the head is disposed approximately 7 inches offset from the focal point and approximately 4 inches offset from the focal line.

13. (ORIGINAL) The receiver station of Claim 12, further comprising a second head disposed substantially at the focal point.

14. (ORIGINAL) The receiver station of Claim 13, wherein the second head receives signals from a geostationary satellite.

15. (PREVIOUSLY PRESENTED) The receiver station of Claim 9, wherein the plurality of satellites comprises a first satellite actively servicing the receiver station, and a second satellite, wherein the apparent position of the second satellite relative to the receiver station is substantially proximate the apparent position of the first satellite relative to the receiver station when the first satellite completes providing its portion of the broadcast service.

16. (PREVIOUSLY PRESENTED) A method of providing at least near continuous broadcast service to a terrestrial receiver, comprising the steps of:

providing a signal having a portion of the continuous broadcast service from at least one of a plurality of satellites at a time, each satellite in an inclined, elliptical, geosynchronous orbit, and

providing service from at least one legacy satellite in a geostationary orbit.

17. (ORIGINAL) The method of Claim 16, wherein the plurality of satellites comprises a first satellite actively servicing the terrestrial receiver, and a second satellite, wherein an apparent position of the second satellite relative to the terrestrial receiver is substantially proximate the apparent position of the first satellite relative to the terrestrial receiver when the first satellite completes providing its portion of the broadcast service.

18. (ORIGINAL) The method of Claim 16, wherein a track of the apparent position of the each of the satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is substantially closed loop.

19. (ORIGINAL) The method of Claim 18, wherein the terrestrial receiver comprises an antenna having a sensitivity characteristic substantially corresponding to the track of the apparent position of each of the satellites.

20. (ORIGINAL) The method of Claim 18, wherein the track of the apparent position of each of the satellites substantially corresponds to a sensitivity pattern of an antenna at the terrestrial receiver.

21. (ORIGINAL) The method of Claim 16, wherein a track of the apparent position of the each of the satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is substantially teardrop-shaped.

22. (PREVIOUSLY PRESENTED) A method of providing at least near continuous broadcast service to a terrestrial receiver, comprising the steps of:

providing a signal having a portion of the continuous broadcast service from at least one of a plurality of satellites at a time, each satellite in an inclined, elliptical, geosynchronous orbit, wherein the orbit is characterized by an orbital inclination approximately equal to 50 degrees and an eccentricity approximately equal to 0.13.

23. (PREVIOUSLY PRESENTED) The method of Claim 20, wherein the orbit is further characterized by a period approximately equal to 86164 seconds, an altitude at perigee equal to approximately 30305 kilometers, and an altitude at apogee approximately equal to 41268 kilometers.

24. (PREVIOUSLY PRESENTED) A method of receiving at least near continuous broadcast service at a terrestrial receiver, comprising the steps of:

receiving a signal having a portion of the continuous broadcast service from at least one of a plurality of satellites at a time, each satellite of the plurality of satellites being in an inclined, elliptical, geosynchronous orbit, and

receiving broadcast service from at least one legacy satellite in a geostationary orbit.

25. (ORIGINAL) The method of Claim 24, wherein the plurality of satellites comprises a first satellite and a second satellite and wherein the step of providing a signal having a portion of the continuous broadcast service from at least one of the plurality of satellites at a time comprises the steps of:

receiving a signal from the first satellite actively servicing the terrestrial receiver; and

receiving a signal from the second satellite when the apparent position of the second satellite relative to the terrestrial receiver is proximate the apparent position of the first satellite relative to the terrestrial receiver.

26. (ORIGINAL) The method of Claim 24, wherein the plurality of satellites comprises a first satellite actively servicing the terrestrial receiver, and a second satellite, wherein an apparent position of the second satellite relative to the terrestrial receiver is proximate the apparent position of the first satellite relative to the terrestrial receiver when the first satellite completes providing its portion of the broadcast service.

27. (PREVIOUSLY PRESENTED) The method of Claim 24, wherein a track of the apparent position of the each of the plurality of satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is closed loop.

28. (PREVIOUSLY PRESENTED) The system of Claim 27, wherein the terrestrial receiver comprises an antenna having a sensitivity characteristic corresponding to the track of the apparent position of each of the plurality of satellites.

29. (PREVIOUSLY PRESENTED) The system of Claim 27, wherein the track of the apparent position of each of the plurality of satellites corresponds to a sensitivity pattern of an antenna at the terrestrial receiver.

30. (PREVIOUSLY PRESENTED) The method of Claim 24, wherein a track of the apparent position of each of the plurality of satellites relative to the terrestrial receivers when the satellite is providing its portion of the at least near continuous broadcast service is teardrop-shaped.

31. (PREVIOUSLY PRESENTED) A method of receiving at least near continuous broadcast service at a terrestrial receiver, comprising the steps of:

receiving a signal having a portion of the continuous broadcast service from at least one of a plurality of satellites at a time, each satellite in an inclined, elliptical, geosynchronous orbit, wherein the orbit is characterized by an orbital inclination equal to 50 degrees and an eccentricity equal to 0.13.

32. (PREVIOUSLY PRESENTED) The method of Claim 31, wherein the orbit is further characterized by a period equal to 86164 seconds, an altitude at perigee equal to 30305 kilometers, and an altitude at apogee equal to 41268 kilometers.

33. – 44. (CANCELED)

45. (PREVIOUSLY PRESENTED) A satellite system comprising:

at least one satellite in a geostationary orbit;

a plurality of satellites, each in an inclined, elliptical geosynchronous orbit;

a receiver station antenna that can communicate with said at least one satellite and at least one of said plurality of satellites during an active period without tracking, and

a gateway having a tracking antenna to track said plurality of satellites.

46. (PREVIOUSLY PRESENTED) The satellite system of Claim 45, wherein each satellite of the plurality of satellites is an active satellite during an active period, and a track of the apparent position of each active satellite relative to the receiver station antenna is substantially closed loop and when an active satellite is nearing the end of the active period, the apparent position of the active satellite substantially overlaps another one of the plurality of satellites that is beginning the active period.

47. (PREVIOUSLY PRESENTED) The satellite system of Claim 46, wherein a beamwidth of said tracking antenna of said gateway is sufficient to encompass both said active one and said another one of said plurality of satellites.

48. (PREVIOUSLY PRESENTED) The satellite system of Claim 46, wherein apparent positions of the plurality of satellites are spatially separated from the apparent position of the at least one satellite in geostationary orbit to avoid interference.

49. (PREVIOUSLY PRESENTED) The satellite system of Claim 48, wherein the angular separation between the plurality of satellites and at least one satellite in geostationary orbit is at least thirty degrees.

50. (PREVIOUSLY PRESENTED) A satellite system, comprising:

at least one satellite in a geostationary orbit;

an augmenting constellation of satellites in non-geostationary orbit, and

a receiver station having a relatively high gain, fixed antenna capable of communication with said at least one satellite in a geostationary orbit and an active one of said augmenting constellation of satellites,

wherein a track of an apparent position of each satellite of the augmenting constellation of satellites relative to said antenna when said satellite is in an active period is substantially closed loop.

51. (PREVIOUSLY PRESENTED) The system of Claim 50, wherein apparent positions of said augmenting constellation of satellites is sufficiently disposed away from the apparent position of said at least one satellite in a geostationary orbit to avoid interference.

52. (PREVIOUSLY PRESENTED) The system of Claim 50, wherein the closed loop shape of the apparent position of said satellite in an active period substantially coincides with a teardrop sensitivity pattern of said antenna.